

FB Line

FB Line, located on top of F Canyon at the Savannah River Site (SRS), was constructed in the early 1960s to receive plutonium-239 nitrate solution produced in F Canyon and convert it to a solid form. This process continued until March 2002, when all scheduled operations to stabilize plutonium-bearing materials from the SRS production era were completed successfully and ahead of schedule.

FB Line, which marked five years without a lost workday case in January 2002, has long been at the forefront of safe, efficient nuclear materials management. In September 1997, the facility instituted a major improvement, when it began operating a new plutonium packaging process called bagless transfer. This technique places stabilized plutonium in rugged, welded stainless steel cans.

The bagless transfer process, using technology developed at SRS, marked the first successful application of this new method of packaging in the DOE Complex, and fulfilled SRS's commitment to begin using this technique for safer plutonium storage.

New work is under way in FB Line, in the form of a new Packaging and Stabilization project. This project will install high-temperature furnaces and additional packaging equipment to stabilize DOE legacy materials thereby meeting the DOE long-term safe storage criterion. These activities are expected to continue until about 2006.

Historically, solutions were transferred from the canyon and concentrated in the FB Line. Then, in subsequent operations, the plutonium was precipitated, filtered, dried and finally reduced to metal form, called a button, about the size of a hockey puck. Employees performed processing activities using equipment enclosed in gloveboxes, to protect them and operating areas from the radioactive material.